09/775,466 Art Unit: 2154

Reply to office action dated 04/29/2004

## Remarks

Applicants have amended the claims to more clearly define the invention.

The present invention addresses the problem encountered by people who are connected to a network such as the Internet over low bandwidth links, such as telephone lines or low bandwidth satellite links. With the increasing use of multimedia, multimedia web pages containing graphics or video, for example, can be extremely slow and frustrating for such users to download, especially as the content may not be relevant to the user's particular needs, although the user won't know that until the content has been downloaded and he or she has had an opportunity to review it.

In the invention a remote server at the far end of a low bandwidth communications link (relative to the local client) can be connected to a data source (typically a website) over a high bandwidth communications link, typically the Internet. The local client sends a request to the remote server, which acts upon the request to retrieve the data from the website over the high bandwidth link and then compress it on-the-fly before sending it over the low bandwidth link to the client in accordance with compression parameters that are specified by the user in the original request for the specific data in question. In this way the user can access remote media rich websites to obtain data at a rate and quality commensurate with the low bandwidth link and the specific needs of the user in respect of the data requested.

The concept of providing an intermediate server that retrieves data from a remote web server in accordance with a customer request, and then compresses this in a manner determined by the user for transmission over the low bandwidth link is believed to be novel and represents an important practical advance in the art for situations where users are committed to low bandwidth links. The remote server of the invention adds an extra functional layer to the prior art.

Glauert teaches a system for video browsing, wherein the video is <u>prestored</u> in layers defined by the particular coding system involved, for example, MPEG or DV. In Glauert the media-encoded files are pre-encoded (pre-compressed) and stored on a server in files of a proprietary nature. This storage and compression does not happen in response to a user request in accordance with compression parameters contained in that request. Please see the opening paragraph on page 1 of Glauert, which explains that the files "<u>stored on the server</u> are encoded to provide enhanced

09/775,466 Art Unit: 2154

Reply to office action dated 04/29/2004

browsing and download features at a device..." (emphasis added). Glauert only works with specific video files that have been pre-encoded and stored. Glauert does not allow the user to access and retrieve data at a selected compression ratio specified by the user that has not been pre-stored. By contrast the present invention will work with any data files that are retrieved from any web site containing multimedia data. In accordance with the invention, unlike Glauert, the retrieved data is compressed as it is being received over the high bandwidth link in accordance with the compression parameters specified in the data request from the user. Glauert therefore clearly does not disclose the method or server defined in the claims as presently amended. In Glauert the user cannot specify how the data is compressed for storage on the media server

In the applicant's respectful submission, Chui does not remedy the deficiency of Glauert. Chui discloses a system for image compression and decompression. Chui does not however disclose a mechanism whereby a local client can specify in a data request specific compression parameters that are used to transfer data to the local client over a low bandwidth link. If arguendo (and the applicants do not concede that such combination is proper) Chui were combined with the Glauert, the combination would not result in the present invention. If, for example, Chui were added to Glauert to provide additional compression between the server and the local client (and there is no such teaching to provide such additional compression), such compression would not be controllable in accordance with parameters set by the user in the data request. If, on the other hand, Chui's compression scheme were adopted in accordance with the teaching of Glauert, then the data would be pre-stored using such compression scheme, but such compression scheme does not disclose any mechanism that would allow the user to select the compression parameters over which the data would be transmitted to the user. Moroever, the combination would not allow a user to specify a data source, have the remote server retrieve data therefrom, and then compress it in accordance with parameters included in the data request.

For all these reasons it is respectfully submitted that the claims as amended are patentable over Glauert and Chui when taken alone or in combination.

The remaining references do not teach a system with the capabilities described above, and in particular they do not teach a system that allows the user to request data from any source (website) and receive it at a compression ratio specified by the user in the data request.

09/775,466 Art Unit: 2154

Reply to office action dated 04/29/2004

It is believed that this application is now in condition for allowance..

Reconsideration and allowance are therefore respectfully requested.

Respectfully submitted,

Richard J. Mitchell Registration No. 34519

Agent of Record

MARKS & CLERK P. O. Box 957, Station B, Ottawa, Ontario, Canada K1P 5S7 (613) 236-9561